



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,678	10/29/2003	Marek Kmickiewicz	960-23-1	6811

30448 7590 04/05/2004

AKERMAN SENTERFITT
P.O. BOX 3188
WEST PALM BEACH, FL 33402-3188

EXAMINER

HO, HA DINH

ART UNIT	PAPER NUMBER
----------	--------------

3681

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/696,678	Applicant(s) KMICKIEWICZ, MAREK	
	Examiner Ha D. Ho	Art Unit 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/865,764.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/29/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the first Office Action on the merits of Application No. 10/696,678 filed on 10/29/03. Claims 1-10 are currently pending.

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

The specification to which the oath or declaration is directed has not been adequately identified. See MPEP § 601.01(a). Note that no check mark was made to identify the mentioned specification (see page 1 of 2).

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation of “means for adjusting a distance between said fixed and movable sheave” recited in claim 8, “a second gear connected to a differential housing” recited in claim 9, and “a second clutch” recited in claim 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5. The abstract of the disclosure is objected to because of using the implied phrase, e.g.,

"The present invention is concerned". Correction is required. See MPEP § 608.01(b).

6. In the specification, page 1, the CROSS-REFERENCE TO RELATED APPLICATION section should be amended to include the updated status of the U.S. Patent Applications No. 10/326,446 and 09/865,764.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 4, 6, 7 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 2 recites the limitation "the input shaft" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim. It is suggested to change "the" to --an--.

Art Unit: 3681

- In claim 4, line 3, the term “such as” renders the claim indefinite since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. One could not tell from such a claim if the narrower range or limitation is a restriction or limitation on the broader range or limitation.
- Claim 6 recites the limitation "said first power supply" in line 3. There is insufficient antecedent basis for this limitation in the claim. It is suggested to insert --motor-- between “first power”.
- Similarly, in claim 7, line 3, it is suggested to insert --motor-- between “first power”.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 3-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yan et al. (US 5,827,146) in view of Yada (JP 57-107462).

Regarding claim 1, Yan et al' 146 teaches a continuously variable power split transmission system (see Fig. 2) comprising a planetary gear set having a sun gear (21), a ring gear (35), a plurality of planet gears (22), and a planet carrier (23); a sun shaft (20); an output shaft (24) connected to the carrier; a countershaft (i.e., the shaft that pulley 30 is mounted on) connected to the ring gear (35) through a first clutch (31); the countershaft being also operatively connected to the sun shaft (20) through a speed variator (26, 27, 28, 29, 30).

Yan et al'146 does not show the countershaft being connected to a second motor.

Yada'462 teaches a transmission system (see Fig. 1) comprising a planetary gear set having a sun gear (4), a ring gear (5), a plurality of planet gears (6), and a planet carrier (12); a sun shaft (2) connected to an engine (1); an output shaft (11) connected to the carrier; a second motor (8) connected to and to drive a countershaft (i.e., the shaft that connected to the motor 8), the countershaft connected to the ring gear.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a second motor connected to the countershaft of Yan et al'146 in view of Yada'462 in order to economize the power on acceleration and reduce the size and the load of the power source (see abstract).

Regarding claims 3 and 4, Yan et al'146 shows the first motor power supply provided by a combustion engine (col. 2, line 27). The modified transmission would have the second motor power supply provided by an electric motor as shown by Yada'462.

Regarding claim 5, Yan et al'146 shows a first control gear (32) fixed on the clutch (31) and a second control gear (34) coupled to the ring gear (35), and a chain (33) connecting the first and second control gears.

Regarding claim 6, Yan et al'146 shows the sun shaft coaxially journaled within the carrier (23), the sun shaft being connected to the first power supply (i.e., the engine) through a motor shaft (i.e., the engine crankshaft).

Regarding claim 8, Yan et al'146 shows the speed variator comprising a pair of pulleys (26, 27 and 29, 30), an endless V-belt (28) and means for adjusting a distance between the fixed and movable sheave of each pulley (col. 2, lines 47-50).

Art Unit: 3681

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yan et al. (US 5,827,146) in view of Yada (JP 57-107462), as applied to claim 1 above, and further in view of Cowan (US 5,167,591).

The combination of Yan et al'146 and Yada'462 does not show the output shaft connected to the carrier through an input shaft of a step-up gearbox.

Cowan'591 teaches a continuously variable power split transmission system (see Fig. 6) including a step-up gearbox having an input shaft (13) and an output shaft (i.e., the shaft that gears Z4 and Z6 are mounted on), the out put shaft being connected to a main ratio gear set (Z3, Z4, Z5, Z6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a step-up gearbox as taught by Cowan'591 connecting the carrier (23) and the output shaft (24) of Yan et al'146 in order to provide an extremely simple gear box having a synchronizing mechanism which allows for stepless speed conversion over the full range from direct drive to low speed drive (col. 15, lines 9-19).

Allowable Subject Matter

10. Claims 7 and 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

11. Claims 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 3681

Cited Prior Art

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Carlsen'732, Rowlett'858 and Yan et al.'686 which each shows a continuously variable transmission.

Communication

13. Submission of your response by facsimile transmission is encouraged. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see M.P.E.P. 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check. Responses submitted by facsimile transmission should include a Certificate of Transmission (M.P.E.P. 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to
the Patent and Trademark Office on _____

(Date)

Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and M.P.E.P. 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Art Unit: 3681

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Examiner Ho whose telephone number is (703) 305-0738. The examiner can normally be reached on Monday-Friday from 7:30 A.M. to 5:00 P.M. Eastern Standard Time. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Mr. Charles Marmor, can be reached at (703) 308-0830. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

Ha Ho 3/31/04

Ha Ho
Primary Examiner
Art Unit 3681